Level II

2015 On-Line Practice Test / Answer Calculations

1. & 2. Using the following information determine a net operating income and capitalization rate for the property below.

Potential gross income	**$150,000**
Vacancy and collection loss	**7%**
Operating expenses	**$60,000**
Mortgage payment (P&I)	**$50,000**
Property value	**$800,000**

PGI	**150,000**
Less: V & C Loss - 7%	**(10,500)**
EGI	**139,500**
Less: Allowable Expenses	**(60,000)**
NOI	**79,500**

1. Net operating income =?

a) $150,000 **c) $79,500**
b) $60,000 **d) $139,500**

2. Capitalization Rate =?

a) 5.7% **c) 9.9%**
b) 25% **d) 10.1%**

Use IRV to calculate Cap Rate, NOI divided by property value, $79,500 / 800,000 = 9.9%

3. A duplex rents for $800 per month on the lower floor and $700 per month on the upper floor. It recently sold for $162,000. What is the potential gross rent multiplier for this property ?

a) 203 **c) 108**
b) 9 **d) 100**

Use VIF, calculate by dividing the value of $162,000 by the total monthly income of $1,500

4. An industrial office has a wall height of 14'. It is a par 6, wall type 3 (fire resistant) construction. What if any is the wall hgt. adjustment for this building ?

a) -$1.80 **c) $3.60**
b) $2.16 **d) -$3.60**

The model wall height for industrial office is 12'. The wall height adjustement is $1.08 x 2 = $2.16

5. A building has a net income of $2,500 per month and it recently sold for $380,000. What is its capitalization rate?

a) 0.6% **c) 10%**
b) 7.9% **d) 11%**

When using IRV it is based upon annual NOI. Take monthly income of $2500 x 12 = NOI of $30,000 divided by sales price of $380,000 = cap rate of 7.9%.

6, 7 & 8.

Building has 40,000 square feet of total area and 5,000 square feet of common area. Market rent for similar bldgs. is $20 per sq. ft. of net rentable area. Vacancy and collection loss is 6% and operating expenses are 35% of effective gross income.

6. What is the potential gross income?

a) $800,000 **c) $658,000**
b) $700,000 **d) $427,700**

Net Leasable Area		**35,000**
Market Rent / Sq. Ft.	**$**	**20.00**
Total PGI		**700000**
Less: V & C of 6%		**-42000**

7. What is the effective gross income?

a) $800,000 **c) $658,000**
b) $700,000 **d) $427,700**

EGI	**658000**
Less: Exp Ratio	**35%**
Allowable Expenses	**230300**
NOI	**427700**

8. What is the net operating income?

a) $800,000 **c) $658,000**
b) $700,000 **d) $427,700**

9. A building has 8,000 square feet. 2,000 square feet is industrial office. The rest is heavy manufacturing. The walls are type 2 and the PAR is 11. The framing type is fireproof steel. What is the adjusted base rate for this building ?

a) $142.10 **c) $142.32**
b) $99.56 **d) $141.00**

Calculation for this problem shown at the end of the practice test.

10., 11., & 12. Determine a value for a subject property given the following information:

	Sale 1	Sale 2	Sale 3	Subject
Sale Price	$95,000	$89,500	$82,000	
Date of Sale	24 months ago	18 months ago	18 months ago	
Time Adjustment	$9,600	$7,200	$7,200	
Time Adjusted Sale Price	$104,600	$96,700	$89,200	
Age	$0	$3,000	($3,000)	12 yrs.
Condition	$4,500	$0	$4,500	Good
Fronts on Lake	($3,300)	$0	$0	Not waterfront
Floor area (Sq. Ft.)	($10,000)	($5,000)	$0	1,500
Garage	$0	$900	$900	Attached
Quality	$0	$0	$4,100	Good
Net Adjustment	($8,800)	($1,100)	$6,500	
Adjusted sale price	$95,800	$95,600	$95,700	

Sale #1 sold two years ago for $95,000. It is 12 years old, has 1,700 square ft., and is in average condition. It is located on the lake. It has a good quality attached garage. The home is also good quality.

Sale #2 sold 18 months ago for $89,500. It is 14 years old and in good condition. It has 1,600 square feet and is not on the lake. It has a good quality detached garage. The home is also good quality.

Sale #3 sold 18 months ago for $82,000. It is 10 years old and in average condition. It has 1,500 square feet and is not located on the lake. There is also an average quality detached garage. The home is also average quality.

The following elements are the contributing factors in the value of the properties:

Time: $400 increase per month
Condition: $4,500 between average and good
Floor area: $50 per square foot
Quality: $4,100 between average and good
Age: $1,500 per year
Location: Lakefront is worth $3,300
Garage: $900 less for detached

10. What is the time adjustment for sale #3?

a) $7,200 **c) $96,000**
b) ($1,100) **d) $100,000**

11. What is the net adjustment for sale #2?

a) $7,200 **c) $96,000**
b) ($1,100) **d) $100,000**

12. What is the indicated value of the subject property, rounded to the nearest $1,000?

a) $7,200
b) ($1,100)
c) $96,000
d) $100,000

13. A parking lot is 20,000 square ft. It is asphalt 2" over 8" base. It is grade B-1 and is in Martin County. What is the adjusted base rate for this paving ?

a) $1.60
b) $1.85
c) $2.13
d) $2.68

Base rate is $2.29, add $ .36 for addl 3" base. The total Base Rate is $2.65 x 115% for B-1 = $3.05 x LCM of 88% = Adj Base Rate of $2.68.

14. A property has a NOI of $522,000 and an EGI of $680,000. It has an overall cap rate of 7.9 %. If the land to building ratio is 1:3, what is the value of the property ?

a) $522,000
b) $6,607,600
c) $8,607,590
d) None of the above

This is an IRV problem. Take NOI of $522,000 divided by Cap Rate of 7.9%

15. A fast food restaurant was built in 1990. It is in average condition. How much depreciation should it get?

a) 75%
b) 45%
c) 25%
d) 20%

Actual age is 25 years. Use Table F-2 in Appendix F to calculate effective age of 26 years. Go to Table F-8 to calculate depr which is 75%.

16. Calculate the median using the following assessment ratios: .982, 1.06, 1.02, .993 and 1.03.

a) 1.02
b) 1.000
c) 0.993
d) 0.982

Rank the ratios low to high, the middle ratio is median which is 1.02

17 - 21. You are completing a ratio study with the following information. Using this information answer the following questions.

Sales	A/V	Sale Price	Ratio	Median	Abs Dev
Sale #1	$103,200	$88,500	1.166	0.984	0.182
Sale #2	$99,500	$99,100	1.004	0.984	0.02
Sale #3	$127,400	$134,000	0.951	0.984	0.033
Sale #4	$118,100	$120,000	0.984	0.984	0
Sale #5	$112,900	$127,500	0.885	0.984	0.099
Total	$ 561,100	$ 569,100			

Avg Abs Dev. = .067

17. Using the above information calculate the Median.

a) .0984
b) 1.012
c) 0.92
d) 1.031

Calculated by ranking the 5 ratios from low to high. The middle ratio is Median of .984.

18. Using the above information calculate the Weighted Mean.

a) 1.017
b) 0.952
c) 1.019
d) 0.986

Calculated by taking the total AV all sales of $561,100 divided by total sale price of all 5 sales of $569,100.

19. Using the above information calculate the Mean.

a) 0.952
b) 0.998
c) 1.019
d) 0.986

Calculated by adding all five ratios together and dividing by the 5 sales.

20. Using the above information calculate the PRD.

a) 0.952	**c) 1.012**	**Formula is the Mean divided by Weighted Mean.**
b) 1.053	**d) 0.986**	**.998 / .986 = 1.012**

21. Using the above information calculate the COD.

a) 0.984	**c) 8.32**	**Formulas is avg abs dev / median x 100. .067 /**
b) 6.809	**d) 1.051**	**.984 x 100 = 6.809**

22. & 23. - A hotel has 22,000 square feet and has 50 rooms. The hotel is a center hall configuration.

22. Using the above information what is the average unit size of each hotel room?

a) 525 sq. ft.	**c) 300 sq. ft.**	**Hotel sq. ft. / # of rooms = avg. unit size.**
b) 440 sq. ft.	**d) 485 sq. ft.**	**22,000 / 50 = 440**

23. Using the above information what is the amount of unit finish adjustment?

a) $2.81	**c) $5.25**	**Refer to unit cost adjustment schedule / motels /**
b) $8.25	**d) $6.00**	**hotels center hall configuration.**

24. You are pricing the first floor of a GCM General Retail store which does not have central air conditioning. What is the amount to be shown on the property record card for this adjustment ?

a) - $ 4.71	**c) + $4.10**	**Refer to Schedule C. The HVAC rate is $10.43,**
b) - $ 2.05	**d) - $ 4.55**	**subtract the heat only adj. of $5.72. Adj. to revmove AC is - $4.71.**

25. What BPA adjustment factor you would apply to a 21 story building, in which the basement level is included in the story height of 21 ?

a) 109	**c) 112**	**Go to Schedule B. The total story height after subtracting basement level is 20. BPA Factor is**
b) 100	**d) 108**	**108**

Use the following information to answer the following questions #26, #27, & #28. A Burger Queen fast food restaurant was built in Martin County in 1990. It contains 2,500 square feet, and is a Grade (B), in Good condition. It has a finished open basement of 1,600 square feet, used for storage. There is an asphalt parking lot (2" over 5") of 12,000 square feet, Graded C-1, in Average condition. The parking lot was constructed the same year as the building.

26. What is the replacement cost new of the basement?

a) $109,320	**c) $65,210**	**See attached PRC**
b) $28,900	**d) $38,960**	

27. What is the total true tax improvement value of the fast food restaurant & paving?

a) $297,800	**c) $352,400**	**See attached PRC**
b) $128,800	**d) $142,600**	

28. What is the true tax value of the asphalt paving?

a) $16,300	**c) $5,000**	**See attached PRC**
b) $9,230	**d) $6,040**	

Problem #9 Answer:

Industrial Office	**2000 / 8000 = 25%**
Heavy Mfg.	**6000 / 8000 = 75%**

	Industrial Office	**Heavy Mfg.**
Base Rate	**$ 129.31**	**$ 117.16**
PAR Adjustment	**$ 8.99**	**$ 9.74**
Adjusted Rate	**$ 138.30**	**$ 126.90**
Fireproof Steel Adj.	**$ 11.75**	**$ 12.84**
Adjusted Base Rate	**$ 150.05**	**$ 139.74**
	25%	**75%**
Weighted Base Rate	**$ 37.51**	**$ 104.81**

Answer: Add the $37.51 + $104.81 = $142.32